# **Original Article**

## Clinical Profile of Childhood Onset Depression Presenting to Child Adolescent and Family Services in Northampton

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#### **ABSTRACT**

**Background:** The clinical profile of depressive disorder in children and young people in Child Adolescent and Family Services (CAFS), Northampton was studied. **Methods:** Twenty-five patients who had attended the CAFS over a period of 2 years were analysed retrospectively. **Results:** The age range of subjects was 8 to 19 years. Majority of patients were in their GCSE (secondary) or A level (higher secondary) courses. In 44% of cases the biological parents of the patients were not living together. Family conflict could be detected in more than half of the subjects. Alcohol related problems were present in one fourth of subjects. Bullying was the most common pattern of child abuse. Physical and sexual abuse was more common in the females than in the males. Almost half of the patients had history of one or more episodes of self-harm. Family history of mental illness, mostly depression, was present in 48% of patients. Most commonly used non-pharmacological interventions were individual psychotherapy and counselling. However in one fourth of patients no psychological intervention was used. Fluoxetine was the most commonly used medication. Frequency of follow-ups ranged from once weekly to once every three monthly. Conclusions: This study suggests that cumulative adverse experiences like high stress level of the GCSE and A level examinations, marital disharmony between parents, stressful family environment etc. singly or together increase the risk of depression in children and young people. It also suggests that parental depression is one of the risk factors associated with depression in this age group. This study also indicates that prescribing antidepressants without any psychological intervention is still a common practice and also that the patients on medication should be followed up more frequently than what is commonly done.

**KEY WORDS:** Childhood, Depressive disorder, services.

#### INTRODUCTION

Child and adolescent major depressive disorder and dysthymic disorder are common, chronic, familial, and recurrent conditions that usually persist into adulthood. The prevalence of MDD is estimated to be approximately 2% in children and 4% to 8% in adolescents, with a male female ratio of 1:1 during childhood and 1:2 during adolescence.<sup>1-4</sup> Forty percent to 90% of youth with MDD have other psychiatric disorders, with at least 20% to 50% having two or more comorbid diagnoses. 5-8 Children with at least one depressed parent are approximately three times more likely to have a lifetime episode of MDD than children of non depressed parents. The lifetime risk for MDD in children of depressed parents has been estimated to range from 15% to 60%. 9-11 During assessment of depressed children and young people, it is imperative for the clinician to be alert to ethnic and cultural factors that may influence the presentation, description, or interpretation of symptoms and the approach to treatment.<sup>12</sup> Cumulative adverse experiences, including negative life events and early childhood adversity, together with parental depression and/or nonsupportive school or familial environments, place young people at risk for developing depression.<sup>13</sup>

The aims of this study were firstly, to try to understand the epidemiological, clinical and management profiles of depressed children and young persons who attended CAFS. Secondly we tried to compare the method of assessment and management of depressed patients who attended CAFS with the ideal protocol, that is, National Institute of Health and Clinical Evaluation (NICE) guidelines.

## **METHODS**

This is a retrospective study and included 25 children and young people with depressive disorder, assessed, diagnosed and followed up in the Child Adolescent and Family Services, Northampton General Hospital, Northampton, over a period of 2 years from Jan. 2004 to Dec. 2005. CAFS is the secondary care for children and young persons with mental health problems. These patients were referred by the primary care and were assessed and treated by the MDT (Multi Disciplinary Team) of the CAFS under supervision of a consultant child and adolescent psychiatrist. ICD-10 descriptions for diagnosis had been used in the CAFS for diagnosis of depressive disorder. Age range of these children and young persons were from 8 years to 19 years. Data were collected from the medical record section of the CAFS. A structured proforma was devised and used to collect data from the records of the patients. Data from all the major areas in the assessment section were collected under various headings, which were co-morbidity, socioeconomic ethnicity, status, homelessness/refugee status, peer group, education, family type, parental support, parental relation, communication, conflict, relationship with parents and peer groups, substance abuse, physical, sexual or emotional abuse, bullying, neglect, history of self harm and family history of psychiatric illness. Data about severity of depression were also collected from the case records. From the management section of the case records, data were collected about type of psychotherapy given, medication used, side effect of medication, frequency of follow up and requirement of hospital admission. The collected pool of data was then analysed using the SPSS software. Basic package of number, percentage, range and mean was calculated for parametric and non parametric variables.

#### **RESULTS**

The average age of subjects was 15.6 years. The sample consisted predominantly of females (76%). Sixty four percent patients were white British, 4% were British blacks and the ethnicity was not documented in 32% cases. Twelve percent of subjects were in primary school, 16% in middle school 44% were in GCSE (44%) and 29% in A level (20%) courses. One subject was not studying and educational status was not documented for one case.

Three fourths (76%) of the sample came from nuclear families, 20% from extended families and in 4% family type was not documented. In 44% cases the biological parents of the patients were separated from each other, in 36% the parental support was labelled as inadequate, and in 56% a family conflict was identified. Relation of the patients with their parents was labelled as inadequate in 48% cases. Thirty six percent of patients did not have a close circle of friends [Table 1].

Table 1: Family and Peer Relationships (N=25)

Variable	Number	Percentage
Relation Between Parents		
Satisfactory	07	28
Strained	01	04
Separated	11	44
Not Documented	06	24
Parental Support#		
Adequate	12	48
Inadequate	09	36
Not Documented	04	16
Any Family Conflict		
Yes	14	56
No	11	44
Relation With Parents@		
Adequate	09	36
Inadequate	12	48
Not Documented	04	16
Close Circle of Friends		
Yes	10	40
No	09	36
Not Documented	06	24

<sup>#</sup> Parental support: adequate means it is clearly documented in the record that there is no deficiency in part of the parents in supporting their child in times of need or crises. @ Relation with parents: adequate means it is clearly documented in the record that the child can confide to his/her parents comfortably and there are no negative feelings whatsoever.

As shown in Table 2, 52% of patients had one or more co-morbid diagnosis, of which eating disorder was the commonest (16%). Twenty four of patients had a history of alcohol abuse and 12% abused other substances.

**Table 2: Clinical Profile** 

Variable	Number	Percentage
Co-morbidity	Tumber	Tereentage
Yes~	13	52
No	12	48
Alcohol Abuse	12	
Yes	06	24
No	14	56
Not Documented	05	20
Substance Abuse (Non Alcohol)		
Yes@	03	12
No	17	68
Not Documented	05	20
Abuse		
Bullying at school	07	28
Physical	03	12
Sexual	03	
None	02	
Not Documented	15	
Self Harm	11	44
Yes¬	14	56
No		
Family History of Psychiatric Illness		
Yes#	12	48
No	10	40
Not Documented	03	12

~Eating disorder=4; Asthma=2; Learning disability=2; Dwarfism=1; Dystonia=1; Panic disorder=1; Cannabis abuse=1; Brain injury=1; Seizure=1; Dyslexia=1; @Cannabis=3; Ecstasy=1; ¬Overdose=6; Cutting=7; Overdose plus Cutting=3; Others=1(Gun Shot); #Depression=7; Psychosis=5; Both=2; Others=2(Alcohol Problem).

Although history of any kind of abuse was not mentioned in most of the cases (60%), bullying was the most common kind of abuse to be elicited (28%). It was more common in male patients than in females. Female patients were more commonly exposed to physical and sexual abuse than their male counterparts. However even for female patients, bullying at school was the most common type of abuse.

Forty four percent of patients had history of one or more episodes of self-harm. Almost half of the females and one third of males had history of at least one episode of self-harm. Cutting was the most common method of self-harm (28%) followed by drug overdose (24%).

Forty eight percent of patients had family history of mental illness that consisted mainly of depression (28%), psychosis (20%) and alcohol problem (8%).

Depression severity was recorded in 28% patients. Mild, moderate, severe depression and severe depression with psychotic feature were present in 4%, 12%, 8% and 4% of patients, respectively.

The most common form of non-pharmacological intervention was individual psychotherapy (36%) followed by counselling (28%). However, in 24% of cases no psychological intervention was used (Table 3). Pharmacological intervention was used in 72% cases. Fluoxetine was the most commonly used medication (78% of those who received medicine). Olanzepine (2 patients) and Resperidone (1 patient)

were used as adjunct to antidepressants. Eighty percent of patients were reviewed at least at monthly intervals. However 4% and 12% of patients were reviewed at 2 monthly and 3 monthly intervals, respectively. Only 22% of the patients who were on antidepressant had weekly follow up. Twenty two percent of the patients who were on medication experienced one or more side effects.

**Table 3: Management** 

Table 5: Management			
Variable	Number	Percentage	
Psychotherapy			
Individual	09	36	
CBT	03	12	
Family Therapy	02	08	
Group Therapy	02	08	
Counselling	07	28	
Watchful Waiting	01	04	
Two or more types of therapies#	04	16	
No psychotherapy offered	06	24	
Medication			
Fluoxetine	14	56	
Other Antidepressant@	08	32	
Two or more Antidepressants	04	16	
Not on medication	07	28	
Follow Up of Patients			
1 Weekly	06	24	
2 Weekly	04	16	
1 Monthly	10	40	
2 Monthly	01	04	
3 Monthly	03	12	
No Follow Up (referred)	01	04	
Side Effect of Medication (N=22)			
Yes~	04	22	
No	14	78	

#Individual plus Counselling=1; Individual plus Group=1; Individual plus CBT=1 and Individual plus Counselling plus Group Therapy=1; @Mirtazepine=2; Citalopram=2; Sertraline=1; Paroxetine=1; Amitriptyline=1; Imipramine=1; ~Raised bilirubin=1; Dystonia=1; Erectile dysfunction=1; Headache=1; Hangover=1.

Thirty six percent of patients required one or more episodes of admission to hospital, most commonly because of attempts of self-harm.

## **DISCUSSION**

The fact that 76% of the patients presenting to CAFS with symptoms of depressive disorder were female suggests that depression in this age group (8-19 years) is more common in females than in males. The finding is similar to studies done on adult population. The predominance of GCSE and A level students in the sample may be because of high level of academic stress during the time of these examinations. However, confounding factors like adolescent crises and the biological and environmental effects of puberty could also have significantly contributed to this finding.

The presence of a significant portion of separated parents in the sample suggests that disturbed family dynamics can act as an aggravating or contributing factor, in the causation of depressive disorder in children and adolescents. The occurrence of definite family conflict in 56% of cases supports this suggestion. Although in our sample parental support was mostly labelled as adequate, this finding may have been contaminated by the difficulty in eliciting such information from patients or their parents.

As in a previous study that showed that 40% to 90% of youth with MDD have other co-morbid psychiatric disorder,<sup>5</sup> we found that 52% of our sample had comorbidity. Alcohol abuse often co-occurred with depression. However, in the absence of a community study and a control group of non-depressed subjects, any conclusion drawn from this study would be premature.

A history of childhood abuse could not be elicited in most subjects. The difficulties in exploring data attached to such a sensitive issue can be understood. The finding that females indulged in self-harming behaviour more often than males supports the existing literature.<sup>15</sup>

Twenty percent of depressed children or young people had a family history of psychosis. This finding is interesting because this may be a reflection of the spectrum concept of psychiatric illness or a possible shared genetic inheritance of depressive and psychotic disorders.

One of the aims of this study was to examine the extent of adherence to the NICE (a nation wide standard protocol in treating children and young persons with depression) guideline in a naturalistic setting. In 24% of cases antidepressants were used without any preceding or parallel psychological intervention irrespective of the severity of depression, which is not consistent with the NICE guidelines, which states that even in severe depression in children and adolescents antidepressants should not be prescribed without an accompanying psychological intervention (preferably CBT).

However, at times the choice of the service user and the mounting psychological pressure for response to treatment impedes strict adherence to guidelines. Only 22% of the patients who were on antidepressants had a weekly follow up, which is again not consistence with the NICE guidelines. Following up on a weekly basis in a tier 2 or tier 3 set up may be inconvenient for the service user as well as the health care professionals.

Thirty six percent of patients required admission to hospital whereas 44% attempted self-harm. We do not know the details of the patients who were not admitted after self-harm. It may be because of low risk found in an initial assessment or refusal by the parents of the patients.

We found that female sex, GCSE (Secondary) and A level (Higher Secondary) examinations, separated parents, family conflict and alcohol abuse were associated with depression in children and young people. However, separated parents, family conflict and alcohol abuse are not specific to depression. We have also found that in a significant number of cases pharmacotherapy is still being used as the first line treatment and in those cases the frequency of follow up is often much less than what is recommended. The requirement of adherence to NICE guidelines and the practical difficulties in doing so have been discussed. However the findings of our study are far from being conclusive. Small sample size, absence of control group, non-use of structured interview and retrospective assessment are the main limitations of the study.

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